

- The High-temperature radiation source based on Silicon carbide (SiC) (~ 500 degree Celsius) has been designed and developed for testing the functionality and performance of ITER ECE Instruments.
- The Thermal Model was developed using FEM based COMSOL Software for analysing the temperature uniformity of emissive surface of the source.
- The IR camera was also used to measure the spatial temperature uniformity across the emissive surface of the source which is +8.4 %/-12%.
- The emissivity of the developed high temperature black body radiation source is determined which is 0.8 in 100-1000 GHz using ITER Prototype Michelson Interferometer.